DOCUMENT RESUME

ED 180 270 HE 010 677

TITLE	Users Manual for the Student Attrition Module. Field Review Edition. CASC Planning and Data System.
INSTITUTION	Council for the Advancement of Small Colleges, Washington, D.C.
PUB DATE	78
NOTE	44p.
AVAILABLE FROM	Council for the Advancement of Small Colleges, Suite 320, One Dupont Circle, Washington, DC 20036 ($5.00)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Change Strategies; *College Attendance; *Data Analysis; Data Collection; Dropout Prevention; *Dropout Research; Dropouts; Enrollment Rate; Guides; Higher Education; *Information Needs; Institutional Research; *School Holding Power; *Small Colleges; Statistical Analysis; Surveys
IDENTIFIERS	*Student Attrition

ABSTRACT

Tools and methods designed to assist colleges in analyzing and managing student attrition are described in this manual. The proposed strategies are intended to help the individual college identify patterns and causes of attrition and to establish reasonable goals and means for reducing attrition. The manual consists of five parts. Part I provides an overview of the issue and addresses the major concerns involved in identifying rates of attrition and possible factors affecting it. Some relationships between this module and other modules of the CASC Planning and Data System are also reviewed. Part II gives a brief overview of the data collection process and instruments. Part III supplies samples of the management information reports provided to data service users and recommends formats for displaying the data to suit specific college needs. Content and format are discussed, and suggestions for methods of interpretation are presented. In Part IV the framework of a systematic, comprehensive, and institutionally-oriented strategy designed to reduce attrition is discussed. Appended are information on the background research, development, and testing of the materials, as well as the rationale for the particular methodology used. (Author/SF)

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PLANNING
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of Small Colleges

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USERS MANUAL
FOR THE
STUDENT ATTRITION MODULE

FIELD REVIEW EDITION

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*This field review edition is the result of the basic research and development activities that are described in the Appendix of this *Manual*. Users' suggestions are welcomed and will be considered in plans for revised editions.

PREFACE

Established in 1956, the Council for the Advancement of Small Colleges (CASC) provides practical programs that serve the nation's small colleges. These programs include the promotion of public understanding of small colleges and their value to American society; in-service development of faculty, administrators, and trustees; and the improvement of both management functions and teaching/learning processes.

The Planning and Data System (PDS) is CASC's most comprehensive contribution to improving management information systems and planning practices in small colleges. Generously funded by the Carnegie Corporation of New York over a five-year period, the PDS has included in-depth research by national and campus-based experts, pilot- and field-testing of new management information tools, and the implementation of planning and data services. The PDS offers the following distinctive features to administrators, faculty, and trustees:

- *The PDS has been designed to meet the needs of small colleges.*

  Task forces that developed the 11 PDS modules consisted mainly of campus personnel from small colleges. Thus, the PDS grew out of task force experience and familiarity with real management information and planning needs. Also, pilot- and field-testing of the 11 modules in a representative institutional sample across the nation assured suitability to small college requirements.

- *The PDS includes both "hard data" and "soft information" capabilities.*

  Nine of the 11 modules provide "hard" data:

  - student recruitment
  - student financial aid
  - student attrition
  - instructional program analysis
  - faculty activity
  - personnel and compensation
  - library costs and services
  - fund raising
  - college goals and climate.*

  Two modules feature "soft information" because existing methodology and theory do not permit the design of statistical and fiscal systems:

  - a marketing approach to program development
  - student learning outcomes.

*Provided by CASC in cooperation with the Educational Testing Service, Princeton, New Jersey.

- *The PDS is a comprehensive system that has interdependent components.*

  Each of the 11 modules can be used independently to deal with a specific institutional concern, such as student attrition, or the modules can be linked in ways that deal with a larger set of concerns. For example, student recruitment, student financial aid, and student attrition modules can be used to complement each other for a synergistic effect. Used in this manner, the PDS can provide important new insights into *systemic* relationships among closely related college operations. Also, college personnel may wish to use all 11 PDS modules over a period of time to identify and resolve comprehensive institutional problems.

- *The PDS delivers planning and data services in four ways.*

  - First, each of the 11 modules includes a users manual. The manual is not intended to be a comprehensive statement on an entire area of concern but, rather, a guide to the use of new tools that have been developed for the PDS. The manual describes what these tools are, what they are intended to do, and how the information derived from them might be used.
  - Second, *each* of the 9 "hard data" modules provides a CASC data service that includes a data collection instrument, data element definitions appropriate to small colleges, a centralized computer processing center, and management information reports that display a college's own data, as well as *anonymous comparative data* from other small colleges across the nation.
  - Third, through the CASC National Consulting Network the PDS provides, at a modest cost, on- and off-campus workshops and consultations on the interpretation and use of the information gained by participating in the PDS.
  - Fourth, colleges can contract with CASC for the development of a comprehensive and continuing planning and management system (data and process) suited to institutional needs. This *comprehensive service* includes diagnosis, design, scheduling, implementation, use, support, and evaluation.

- *The PDS generates important new national information on small colleges.*

  Small independent colleges using the CASC data service contribute to the continuous building of a first-time national data base that is designed to be used in two ways: (1) to provide participating colleges anonymous comparative information in new descriptive categories (i.e., size, region, racial composition, endowment) as volume in the data base permits; and (2) to influence public policy at the state and federal levels.

Additional information about the CASC Planning and Data System may be obtained by contacting:

COUNCIL FOR THE ADVANCEMENT OF SMALL COLLEGES
Planning and Data System
One Dupont Circle, Washington, DC 20036
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TABLE OF CONTENTS

Preface iii

List of Tables vi

Acknowledgments vii

Introduction ix

PART I. THE STUDENT ATTRITION MODULE

A. Student Attrition: A Complex Phenomenon 1
B. Objectives of the Module 2
C. Components of the Module 2
D. Relationship to Other Modules of the CASC Planning and Data System 4
E. Summary 4

PART II. DATA COLLECTING AND PROCESSING PROCEDURES

A. Rate of Attrition Data Collection Instrument 5
B. College Experience Survey 5
C. General Processing Instructions for the Rate of Attrition Instrument and the College Experience Survey 6

PART III. DATA REPORTS AND INTERPRETATION

A. Introduction 7
B. Rate of Attrition Data 7
C. Interpretation and Use of Rate of Attrition Data 16
D. College Experience Survey Data 17
E. Interpretation and Use of College Experience Survey Data 19

PART IV. DESIGNING AN INTEGRATED PROGRAM TO INCREASE STUDENT RETENTION

A. Introduction 23
B. Planning for Student Retention 23
C. Retention Ideas That Have Worked at Other Colleges 26
D. Using Other Modules of the CASC Planning and Data System 28

APPENDIX. DEVELOPING AND TESTING THE MODULE 31

LIST OF TABLES

1. Attrition Data by Class and Year 8
2. Attrition-Retention Data by Year 9
3. Attrition-Retention Data: Three-Year Averages by College 10
4. Attrition-Retention Data by Year for All Colleges 10
5. Summary Attrition Data by Class and Year by College Type and Racial Mix 11
6. Summary Attrition Data by Class and Year by College Size 12
7. Summary Attrition Data by Class and Year by Region of the Country 13
8. Average Attrition-Retention Data by Type, Racial Predominance, Size, and Region 14
9. Student Attrition Module: Summary of National Data Base as of_____ 15
10. Sample Set of Comparisons Using National Attrition Data 16
11. Percentage of Respondents Indicating "Very Important" (4) and "Important" (3) Reasons for Attrition 18
12. College A's CES Items Rated Either "Very Important" (4) or "Important" (3) That Indicate Major Differences from the National Average 19
13. College B's CES Items with Major Differences from the National Average 20
14. CES Item Categorization 22

ACKNOWLEDGMENTS

Contributions to the Student Attrition Module of the CASC Planning and Data System (PDS) were made by many individuals and agencies. A series of CASC projects, described in the Appendix, involved a number of people who shared in the responsibility of analyzing needs, developing concepts, and designing data techniques that have evolved to be the PDS.

The Student Attrition Task Force of the CASC Research and Management Project (RMP) built on the work of earlier projects and designed and tested material in this Module.

John Newby (Spring Arbor College), chairman of the task force, coordinated the research and development, the field-testing of the Rate of Attrition (ROA) instrument, and the writing and preparation of this *Manual.* John Stahl (Eastern Mennonite College), task force member, was especially helpful in refining the ROA, in supervising the development of the data processing software, and in handling the processing of institutional attrition data.

Lloyd Foerster (Bethany College, Kansas), co-chairman, together with Julia Duckwall (Bethany College), provided insight, drawn from years of administrative responsibility in small colleges, in developing the College Experience Survey (CES), in supervising the pilot-testing of the CES, and in proposing means for translating attrition data gathered through the ROA and CES instruments. Victor Streufert (Bethany College) was helpful in clarifying the instrument and in preparing the data handling capability.

Other task force members were: Timothy Brown (Averett College), Michael Rosenthal (Bard College), and John Stephens (Mid-America Nazarene College). Each member made significant contributions toward the development of this Module. Linda Shultz of Spring Arbor College served as secretary to the task force chairman during the entire research and development process.

Appreciation is also extended to Lee Noel, regional vice president of the American College Testing Program, for his most helpful review and critique of this Module.

William A. Shoemaker, CASC Vice President for Research and designer and director of both the RMP and PDS, is general editor of this *Manual.* Denise S. Podar, administrative assistant, assisted in developing the data collection packet, in coordinating data processing procedures, and in preparing this *Manual* for publication.

Special appreciation is extended to the Carnegie Corporation of New York for the generous funding that made possible the development of this Module and that contributed, in part, to the development of this Manual. *The statements made and views expressed, however, are solely the responsibility of the publisher.*

The publication of this Manual was further supported in part by the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred. This support was made possible through the Small College Consortium, funded through the USOE Basic Institutional Development Program, with CASC as the assisting agency.

INTRODUCTION

This *Manual* describes tools and methods that are designed to assist colleges in analyzing and managing student attrition. The proposed strategies are intended to help the individual college identify patterns and causes of attrition and to establish reasonable goals and means for reducing attrition. Certain materials in the *Manual*, such as data collection instruments and management information reports, have been developed for use primarily in liberal arts colleges. The *Manual* consists of five parts.

Part I provides an overview of the issue and addresses the major concerns involved in identifying rates of attrition and possible factors affecting it. The objectives of this Module are outlined, and the tools and services needed to accomplish them are described. Some relationships between this Module and other modules of the CASC Planning and Data System are also reviewed.

Part II gives a brief overview of the data collection process and instruments. More specific instructions can be found in the data collection packet that is provided for colleges participating in the data service.

Part III supplies samples of the management information reports provided to data service users and recommends formats for displaying the data to suit specific college needs. Content and format are discussed, and suggestions for methods of interpretation are presented.

Part IV outlines the framework of a systematic, comprehensive, and institutionally-oriented strategy designed to reduce attrition.

The *Appendix* provides information on the background research, development, and testing of the materials. It also gives some of the rationale for the particular methodology used.

The *Manual* is organized to help the user select sections according to his interest. For example, a college president or other high-level administrator may be primarily interested in the module overview in Part I and the general management suggestions in Part IV. Those responsible for data collection will carefully note Part II, and the department head or area administrator responsible for use of the data will be particularly concerned with the suggestions and data descriptions in Part III. A person wanting to know how and why the materials were developed as they now exist will read "Developing and Testing the Module" in the Appendix.

PART I

THE STUDENT ATTRITION MODULE

A. Student Attrition: A Complex Phenomenon

In recent years, colleges have become increasingly concerned about students who fail to graduate. However, there is no consistent evidence to indicate that attrition rates are higher now than in previous years. One probable cause of this greater concern is that the number of people of traditional college-age (18 to 22 years) is declining. For well-known reasons, this diminishing pool of the 18- to 22-year-old-cohort is causing college administrators to become more interested in retaining students.

The recent emergence of such concepts as "market analysis" and "better information for student choice" has also helped to focus attention on student attrition. Colleges have begun to analyze why students select a particular college and how students perceive their college experiences as compared to their expectations. Student and parental interests appear to be changing, and these changes can be studied in ways that show patterns and causes of student attrition.

Some student attrition is unpredictable and unpreventable; some may well be desirable. In either case, these factors must be viewed from the distinctive vantage point of any given college.

Many institutional research projects have been conducted on student attrition, each in isolation from the others, and all largely provincial in nature and of little value beyond the particular institution studied. A principal limitation of these studies has been their lack of consistency in terminology. The results, as Myrna Sigler points out,[1] are not only contradictory but also misleading.

The literature does agree on one primary point. This is that attrition is a complex phenomenon which defies simple analysis. (See Tinto's thorough review,[2] Astin's standard reference,[3] and Cope and Hannah's materials.[4]) No single factor has yet been isolated as the major cause of attrition.

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[1] Myrna Carney Sigler, "Attrition Research: The Past and Future" (paper presented at the 31st National Conference of the American Association for Higher Education, Chicago, March 1976.)

[2] Vincent Tinto, "Dropout From Higher Education: A Theoretical Synthesis of Recent Research," *Review of Educational Research*, Vol. 45, No. 1 (Winter, 1975), 89-125.

[3] Alexander Astin, *Preventing Students From Dropping Out* (San Francisco: Jossey-Bass, 1975).

[4] Robert Cope and William Hannah, *Revolving College Doors: The Causes and Consequences of Dropping Out, Stopping Out, and Transferring* (New York: John Wiley & Sons, 1975).

This *Manual* describes tools, methods, and services that will assist college personnel in identifying the magnitude and pattern of student attrition and the factors that seem to influence it. Comparative information from other small colleges is provided to institutions that choose to use the data service. Derived nationally from colleges participating in the data service, these anonymous comparative data not only provide new insights into this complex phenomenon but also permit the identification of distinctive patterns and causes at a particular college.

B. Objectives of the Module

The objectives of the Student Attrition Module are:

1. To help colleges identify their annual rates of attrition for full-time freshmen entering in the fall semester.

2. To provide a brief data-collection instrument and carefully defined data elements so that comparative attrition rates can be generated.

3. To display comparative attrition rates by selected variables (i.e., size, type of control, geographic region, and racial mix) so a college can compare itself not only to national norms but also to similar institutions.

4. To assist colleges in identifying factors causing attrition on their campuses.

5. To provide an instrument for collecting comparative data regarding the causes of student attrition.

6. To provide a format for displaying comparative data on the causes of student attrition so that colleges can identify factors of particular importance to them.

7. To help colleges interpret and use data in designing retention programs.

8. To help colleges establish realistic retention goals.

C. Components of the Module

This Module of the CASC Planning and Data System (PDS) consists of three major components: data services (data collection and reporting), this *Users Manual*, and workshops and consultations.

1. *Data Services*

Two data services are available:

(a) Rate of Attrition (ROA)

(b) College Experience Survey (CES) – causes of attrition.

Each data service has a data collection instrument and data reports.

The *Rate of Attrition* (ROA) instrument is used to collect data needed to analyze the rate of attrition by year; by average across years; by percentage of new, full-time freshmen entering in the fall term; and by percentage of total full-time, fall-term enrollment. The instrument excludes consideration of transfer students and students entering at other times during the college year. (See *Appendix*, Part C, for explanation.) It focuses on new, full-time freshmen entering in the fall semester as a cost effective way to deal with the majority of student attrition. Attrition data for a five-year period are required.

Nine tables display information generated through participation in the ROA. Each table enables the participating college to interpret its attrition data through appropriate comparisons. (See Part III for detailed description of tables.)

The second data service, the *College Experience Survey* (CES), is a questionnaire administered to students who have left the college of initial enrollment. The CES enables a college to collect information from former students on what they believe contributed to their individual decisions to leave. The instrument also gives students an opportunity to indicate, on a four-point scale, the intensity of each reason that influenced their decision to leave.

The primary report for the CES is entitled *Percentage of Respondents Indicating "Very Important" and "Important" Reasons for Attrition.* The percentage of former students who rated a particular reason as "important" or "very important" is reported to each participating college. This is then displayed in comparison to the composite mean and range of all other colleges that have used the form. Table 11 is a sample of the report with hypothetical data.

In addition, colleges participating in the data service receive a report for Items 1-50 (causes) and 53-55 (subsequent enrollment), separating responses by sex and by major.

2. *Users Manual*

This *Users Manual for the Student Attrition Module* provides an overview of the Module, descriptions of data collection instruments and illustrations of management information (MIS)* reports, suggestions for analyzing and interpreting data, and suggestions for developing a student retention program.

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*MIS (management information system) refers to an integrated set of management data reports that relate to various areas and functions of an organization.

3. *Workshops and Consultations*

Workshops and consultations are available at nominal cost through the CASC National Consulting Network for colleges that desire assistance in analyzing attrition and in developing a retention program.

Held periodically, national and regional workshops focus on the specific needs of participants who attend. Individualized on-campus workshops can also be arranged to deal with specific program development and personnel needs.

Consultation can be arranged for assistance at any stage of analysis and program development: to oversee the entire process, to coordinate the use of several PDS modules for greater institutional impact, or to carry out total institutional planning with a possible special emphasis on this or any other module.

D. Relationship to Other Modules of the CASC Planning and Data System

The 11 modules in the PDS can be used independently or in combination to increase insight and impact. A college studying rates and causes of student attrition also might want to analyze its admissions program: Which of the students that are admitted actually stay? How might admissions criteria, programs offered, college literature, and recruitment activities ultimately affect retention?

There is some evidence that financial aid awards can have a significant impact on admissions and retention. A college may wish to look closely at attrition and financial aid data to analyze the implications for such issues as the timing of awards, the percentage and dollar amounts of awards made to upperclassmen, the amount of unfunded institutional aid available, and the type of student receiving aid as compared to the type of student retained.

From another perspective, displaying attrition patterns by major field of study in relation to program costs (refer to the PDS Instructional Program Module) and departmental displays from the PDS Faculty Activity Module might provide valuable information about how attrition influences costs and how certain faculty activities affect student retention. An even broader application of the data can also be important: that is, showing the relationship of attrition to the clarity of, and consensus on, institutional goals. In addition, the concept of market analysis and some of the tools and methodology in the module on a Marketing Approach to Program Development might also be helpful in pulling together and analyzing various institutional relationships.

E. Summary

The student attrition problem is complex. The PDS Student Attrition Module is designed to assist colleges in understanding the patterns and causes of attrition. This *Manual* suggests procedures, tools, and services that can be used to identify college programs and policies that may need adjustment and to develop an integrated program for student retention.

PART II

DATA COLLECTING AND PROCESSING PROCEDURES

There are two data collection instruments for the Student Attrition Module: the *Rate of Attrition* (ROA) instrument and the *College Experience Survey* (CES). The ROA is intended to be used in the first stage of data collection; the CES, in the second.

A. Rate of Attrition Data Collection Instrument

Data Required for the ROA

The ROA requires data that are usually available in the registrar's office: the entrance and leaving of full-time freshmen, returning students, and transfer students entering in the fall term.

ROA Data Collection Packet

The material needed for the ROA is contained in the ROA Data Collection Packet:

- the data collection form
- instructions and definitions required to complete the form
- a data processing schedule
- data processing instructions.

The data collection packet is sent after college personnel indicate an intention to participate by mailing the order form and participation fee.*

B. College Experience Survey

Students who have left college prior to completing their program are contacted for information regarding their reasons for leaving. The College Experience Survey (CES) is sent to them at their last-known addresses.

* The order form enclosed with this *Manual* may be used to request participation in the data service, or the central CASC office may be contacted for more information (telephone: 202-659-3857).

CES Data Collection Packet

The material needed to use the CES is contained in the CES Data Collection Packet provided to participating colleges that have followed the procedures outlined above for the ROA. The packet contains:

- copies of the survey
- instructions for administering the CES
- activity schedule for conducting the CES
- processing instructions
- sample letter for first mailing to former students
- sample letter for second mailing to former students
- a survey return form.

C. General Processing Instructions for the Rate of Attrition Instrument and the College Experience Survey

The completed ROA and CES are processed by a CASC computer center that is supervised by a module coordinator. The module coordinator is the technical liaison between participating colleges and the data processing facility. This person receives the completed forms directly from a college, reviews them for clarity and institutional consistency, and forwards them to the computer center. The module coordinator is available to users to answer questions about data element definitions, processing, and technical interpretations.

PART III

DATA REPORTS AND INTERPRETATION

A. Introduction

This part of the *Manual* describes the reports received by colleges using the student attrition data services. In addition to individual college reports, comparative data are reported from the nationwide data base comprised of all colleges participating in the data service. Reports according to institutional subsets that permit comparisons by size, type, geographic region, and racial mix are also provided as adequate comparative data bases develop in each category. Additional categorization will be provided as the number of participating colleges becomes larger. Institutional anonymity is always preserved when comparative data are presented.

The sample reports provided in this *Manual* use hypothetical data; this should be kept in mind whenever the *Manual* suggests recommendations regarding the interpretation and use of institutional data. In this part of the *Manual*, data display formats oriented to special institutional needs are also suggested, and some recommendations are made regarding the use of the data to support the development of a retention program. Section IV of the *Manual* then focuses on a systematic process that is designed to integrate the analytic, planning, and program activities to produce an effective campus-wide program of student retention.

B. Rate of Attrition Data

The attrition data collected through the Rate of Attrition (ROA) instrument provide two different methods of establishing attrition rates:

(1) attrition as a percentage of full-time freshmen entering in the fall term

(2) attrition as a percentage of total full-time enrollment.

Nine reports are provided to colleges participating in this portion of the data service. Attrition rates after one and two years of enrollment are reported as well as the trend across three successive years. Other tables provide comparison by institutions of similar size, racial mix, geographic region, and type. A detailed description of each table follows.

TABLE 1

ATTRITION DATA BY CLASS AND YEAR
(% of Full-Time Freshmen Entering in the Fall Term)

Class Entering As New Freshmen		Average FTE				All Colleges	
		751	794	804*	918	Mean	Standard Deviation
1974	–Attrition % after 1st year	41.49	29.41	44.25	17.67	35.38	9.35
	–Attrition % after 2nd year	18.26	18.43	16.67	10.60	18.05	4.55
	–Total % after 2nd year	59.75	47.84	60.92	28.27	53.43	
1975	–Attrition % after 1st year	31.32	45.88	38.25	11.26	35.86	11.65
	–Attrition % after 2nd year	21.43	21.86	25.81	13.42	18.69	5.21
	–Total % after 2nd year	52.75	67.74	64.06	24.68	54.55	
1976	–Attrition % after 1st year	35.33	33.61	40.43	14.29	33.17	7.65
	–Attrition % after 2nd year	14.67	18.67	15.74	15.18	18.83	4.02
	–Total % after 2nd year	50.00	52.28	56.17	29.46	52.01	
1977	–Attrition % after 1st year	29.17	33.21	42.47	16.83	30.80	7.13
	–Attrition % after 2nd year	17.71	19.78	21.46	13.94	16.12	4.90
	–Total % after 2nd year	46.88	52.99	63.93	30.77	46.93	
1978	–Attrition % after 1st year	27.37	30.61	40.83	20.73	32.56	6.49
Averages	–Attrition % after 1st year	32.94	36.34	41.24	16.15	33.68	7.49
	–Attrition % after 2nd year	18.02	19.69	19.92	13.29	17.96	2.79
	–Total % after 2nd year	50.95	56.03	61.16	29.44	51.63	

*College A

HYPOTHETICAL

Table 1 reports the attrition percentage rates after each of the first and second years of new full-time freshmen entering in the fall semester.* The average percentage is reported for each year. The asterisk following the average FTE student body size at the top of the table indicates the column displaying the data for a hypothetical college – in this illustration it simply refers to College A. (The FTE shown is an average of the two most recent years for which enrollment is reported.) A sample of data from three other hypothetical colleges similar in size is provided for purposes of comparison and to illustrate how the data base is used. The righthand columns report the mean and standard deviation for all institutions in the data base. The mean provides a comparison for College A with the hypothetical national average. If a college's percentage of attrition is different from the national average by less than the standard deviation, the college is within the range of variance for attrition experienced by two-thirds of the colleges in the data base. If the percentage differs by more than the standard deviation, this indicates that the college is in a small, statistically extreme group of colleges in the data base.

Data reported in *Table 2* change the point of reference from fall full-time entering freshmen to *total* fall full-time enrollment. The percentages shown are based on data provided by the participating college and give the institution a three-year view of students retained, lost, and graduated. This demonstrates the magnitude of the attrition problem as a percentage of full-time enrollment after controlling for the number and percentage of graduates. This report provides a picture of the attrition/retention pattern for three academic years.

TABLE 2

ATTRITION-RETENTION DATA BY YEAR
(% of Total Full-Time Enrollments)

College A

	1975-76		1976-77		1977-78		National Average %
	Number	%	Number	%	Number	%	
Retention	482	67.60	489	65.37	518	69.25	67.41
Attrition	59	8.27	106	14.17	79	10.56	11.00
Seniors (to be graduated)	172	24.13	153	20.46	151	20.19	21.59
TOTAL	713	100.00	748	100.00	748	100.00	100.00

HYPOTHETICAL

*Only the first two years are used because almost all attrition occurs during this period. (See Appendix, "Developing and Testing the Module.")

The percentages shown in *Table 3* represent three-year averages. The format of the table is the same as Table 2 with the addition of comparative averages for the same three hypothetical colleges shown in Table 3.

TABLE 3

ATTRITION-RETENTION DATA: THREE-YEAR AVERAGES BY COLLEGE (% of Full-Time Enrollments)

	Average College FTE				All Colleges	
	751	794	804*	918	Average	Standard Deviation
	%	%	%	%	%	
Retention	67.38	56.43	67.41	67.75	59.75	8.92
Attrition	14.29	25.52	11.00	9.24	19.96	10.89
Seniors	18.33	18.05	21.59	23.01	20.29	2.55
TOTAL	100.00	100.00	100.00	100.00	100.00	0.00

*College A

HYPOTHETICAL

The data displayed in *Table 4* show attrition/retention and seniors as a percentage of the total full-time fall enrollment for all colleges in the data base for three consecutive years, with a three-year average and standard deviation.

TABLE 4

ATTRITION-RETENTION DATA BY YEAR FOR ALL COLLEGES (% of Total Full-Time Enrollment)

	All Colleges				
	1975-76	1976-77	1977-78	Average	Standard Deviation
	%	%	%	%	
Retention	60.30	62.10	64.97	62.19	4.46
Attrition	19.67	17.59	13.38	17.35	5.74
Seniors	20.03	20.30	21.65	20.47	2.24
TOTAL*	100.00	100.00	100.00	100.00	0.00

*rounded

HYPOTHETICAL

Tables 5, 6, 7, and 8 are examples of the reports of comparative data categorized by institutional sub-set, provided to colleges using the data service.

Table 5 provides average percentages by class, by year, by type of institution, and by racial predominance with averages across several years.

TABLE 5

SUMMARY ATTRITION DATA BY CLASS AND YEAR BY COLLEGE TYPE AND RACIAL MIX (% of Full-Time Freshmen Entering in the Fall Term)

Class Entering as New Freshmen		By Type		By Racial Predominance	
		Single Sex	Co-Ed	Historically Non-White	Historically White
		%	%	%	%
1974	Attrition after 1st year.	28.21	33.28	20.47	33.48
	Attrition after 2nd year.	17.03	17.58	8.73	18.14
	Total after 2nd year.	45.24	50.86	29.20	51.62
1975	Attrition after 1st year.	29.74	35.11	28.40	34.82
	Attrition after 2nd year.	15.99	18.79	12.66	18.82
	Total after 2nd year.	45.73	53.90	41.06	53.64
1976	Attrition after 1st year.	26.49	35.32	33.46	34.19
	Attrition after 2nd year.	12.17	17.29	6.60	17.32
	Total after 2nd year.	38.66	52.61	40.06	51.51
1977	Attrition after 1st year.	31.93	34.05	21.53	34.66
	Attrition after 2nd year.	18.36	16.92	11.92	17.47
	Total after 2nd year.	50.29	50.97	33.45	52.12
1978	Attrition after 1st year.	25.74	34.55	23.09	34.10
Averages:					
	Attrition after 1st year.	28.42	33.86	25.39	33.69
	Attrition after 2nd year.	15.12	17.53	9.98	17.72
	Total after 2nd year.	43.54	51.39	35.37	51.41
National Data as of (*date*)					

HYPOTHETICAL

Data in *Table 6* are shown as a percentage of new full-time fall freshmen and are similar in format to Table 5, except that the percentages are also categorized by college size as well as multi-year averages within the same size categories.

TABLE 6

SUMMARY ATTRITION DATA BY CLASS AND YEAR BY COLLEGE SIZE
(% of Full-Time Freshmen Entering in the Fall Term)

Class Entering as New Freshmen		By Size			
		0-499	500-749	750-999	1000 & Over
		%	%	%	%
1974	Attrition after 1st year.	41.87	28.44	28.79	26.88
	Attrition after 2nd year.	17.85	17.93	17.83	16.38
	Total after 2nd year.	59.72	46.37	46.62	43.26
1975	Attrition after 1st year.	41.51	32.26	36.25	26.71
	Attrition after 2nd year.	18.54	17.70	19.24	18.55
	Total after 2nd year.	60.05	49.96	55.49	45.26
1976	Attrition after 1st year.	42.08	31.81	35.62	25.80
	Attrition after 2nd year.	15.39	18.70	15.21	16.58
	Total after 2nd year.	57.47	50.51	50.83	42.38
1977	Attrition after 1st year.	42.57	32.36	27.85	27.84
	Attrition after 2nd year.	17.20	17.29	21.22	14.47
	Total after 2nd year.	59.77	49.65	49.07	42.31
1978	Attrition after 1st year.	39.91	32.82	30.04	26.78
Averages:					
	Attrition after 1st year.	40.46	31.62	31.71	26.20
	Attrition after 2nd year.	16.70	17.90	18.37	16.56
	Total after 2nd year.	57.16	49.52	50.08	42.76
National Data as of (*date*)					

HYPOTHETICAL

The data in *Table 7* are similar to the preceding two tables but report percentages for colleges within six regional areas of the country.

TABLE 7

SUMMARY ATTRITION DATA BY CLASS AND YEAR BY REGION OF THE COUNTRY
(% of Full-Time Freshmen Entering in the Fall Term)

Class Entering as New Freshmen		New England	Mid-East	South East	Great Lakes	Plains	So. West Rocky Mts. Far West
1974	Attrition after 1st year.	23.61	27.39	33.00	26.21	40.42	42.12
	Attrition after 2nd year.	17.02	13.79	15.52	20.75	18.37	18.98
	Total after 2nd year.	40.63	41.18	48.52	46.96	58.79	61.10
1975	Attrition after 1st year.	27.91	24.01	38.80	33.92	40.12	39.81
	Attrition after 2nd year.	15.12	22.48	14.33	20.05	19.12	16.80
	Total after 2nd year.	43.03	46.49	53.13	53.97	59.24	56.61
1976	Attrition after 1st year.	24.39	29.19	36.18	31.54	35.84	44.09
	Attrition after 2nd year.	15.66	17.92	14.01	16.33	21.50	14.03
	Total after 2nd year.	40.05	47.11	50.19	47.87	57.34	58.12
1977	Attrition after 1st year.	21.57	30.17	35.29	29.50	43.32	37.55
	Attrition after 2nd year.	21.41	15.98	14.34	20.50	13.60	18.47
	Total after 2nd year.	42.98	46.15	49.63	50.00	56.92	56.02
1978	Attrition after 1st year.	26.99	27.24	36.46	29.27	37.61	41.06
Averages:							
	Attrition after 1st year.	24.89	26.78	35.95	28.97	39.37	40.93
	Attrition after 2nd year.	17.30	17.22	14.55	19.00	18.15	17.07
	Total after 2nd year.	42.19	44.00	50.50	47.97	57.52	58.00
National Data as of (*date*)							

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Information shown in *Table 8* reports averages for all colleges in the current data base and shows percentages of attrition, retention, and seniors by type, race, size, and region.

TABLE 8

AVERAGE ATTRITION-RETENTION DATA BY TYPE, RACIAL PREDOMINANCE, SIZE, AND REGION

(% of Total Full-Time Enrollments)

	Retention %	Attrition %	Seniors %	Total %
BY TYPE				
Single Sex	65.76	14.85	19.39	100.0
Co-Ed	60.52	20.41	19.08	100.0
BY RACIAL PREDOMINANCE				
Historically				
Non-White	65.59	12.15	22.26	100.0
White	60.90	20.20	18.89	100.0
BY SIZE				
0 – 499	58.34	24.98	16.68	100.0
500 – 749	62.00	17.92	20.08	100.0
750 – 999	63.03	17.72	19.25	100.0
1000 – Over	63.12	15.74	21.13	100.0
BY REGION				
New England	66.87	14.71	18.43	100.0
Mid-East	67.42	13.27	19.31	100.0
South East	62.60	16.59	20.81	100.0
Great Lakes	59.72	20.00	20.28	100.0
Plains	56.75	24.85	18.40	100.0
West	55.65	28.31	16.04	100.0
National Data as of (*date*)				

HYPOTHETICAL

Table 9 reports the current profile of hypothetical colleges providing the data for Tables 5, 6, and 7 in the reports received by a participating college.

TABLE 9

STUDENT ATTRITION MODULE: SUMMARY OF NATIONAL DATA BASE AS OF_____ (*date*)

	Universe of Liberal Arts Colleges		Data Service Participants	
	n	%	n	%
DISTRIBUTION BY REGION:				
New England	67	9.6	12	11.9
Mid-East	120	17.1	16	15.8
South East	167	23.9	24	23.8
Great Lakes	131	18.7	22	21.8
Plains	101	14.4	14	13.9
*West	110	15.7	13	12.8
Outlying Areas	4	.6	0	0.0
	700	100.0	101	100.0
DISTRIBUTION BY FTE ENROLLMENT:				
0 – 499	187	26.7	31	30.8
500 – 749	176	25.1	29	28.7
750 – 999	114	16.3	16	15.8
1000 – Above	223	31.9	25	24.7
	700	100.0	101	100.0
DISTRIBUTION BY RACIAL PREDOMINANCE:				
Historically Non-White	43	6.1	6	5.9
Historically White	657	93.9	95	94.1
	700	100.0	101	100.0
DISTRIBUTION BY TYPE:				
Coordinate	9	1.3	0	0.0
Male	38	5.4	4	4.0
Female	94	13.4	17	16.8
Coed	559	79.9	80	79.2
	700	100.0	101	100.0

HYPOTHETICAL

*Combines Rocky Mountains, South West, and Far West Regions

C. Interpretation and Use of Rate of Attrition Data

The major use of the attrition rates generated by the Rate of Attrition instrument is to assist colleges in understanding patterns and trends of student attrition. The opportunity to compare local attrition rates with other similar colleges may be useful in understanding the magnitude of an attrition problem.

Table 10 is designed to show how a college might display its own rates in comparison with information from similar colleges supplied to them through the PDS.

TABLE 10

SAMPLE SET OF COMPARISONS USING NATIONAL ATTRITION DATA

	College A %	NATIONAL AVERAGE				
		All Colleges %	Historically White Colleges %	Co-Ed Colleges %	Size 750-999 %	Plains %
		PERCENT OF NEW FRESHMEN ENTERING IN THE FALL TERM				
Attrition after 1st year	32.94	33.13	33.69	33.86	31.71	39.37
Attrition after 2nd year	18.02	17.21	17.72	17.53	18.37	18.15
TOTAL attrition after 2 years	50.96	50.34	51.41	51.39	50.09	57.52
		PERCENT OF TOTAL FULL-TIME ENROLLMENT				
Retention	67.41	61.22	60.90	60.52	63.03	56.75
Attrition	11.00	19.67	20.20	20.41	17.72	24.85
Seniors	21.59	19.12	18.89	19.08	19.25	18.40
TOTAL*	100.00	100.00	100.00	100.00	100.00	100.00

*rounded

HYPOTHETICAL

Colleges must look carefully for unusual local circumstances and institutional and constituent distinctions which may affect attrition rates. For example, a college having two-year programs may experience lower rates of attrition after one year but significantly higher ones after two years. The ROA treats two-year graduates as attrition statistics, since it was designed to measure retention through four-year graduation. Thus, colleges with two-year

programs would consider this fact in analyzing the data generated through the ROA and would want to develop supplemental reports based on their needs. Colleges having a significant proportion of second- or third-term entrants, transfer matriculants, re-entering students, and other non-traditional students will also need to analyze the attrition of these students.

Participation in the ROA is intended to be the first level of analysis of the attrition phenomenon. The best the ROA can do is to clarify the magnitude of the problem and help to identify important trends and patterns. It is important to update the ROA annually to monitor changes. The next recommended step is to attempt to analyze the factors that influence attrition. The College Experience Survey is designed for this task.

D. College Experience Survey Data

The College Experience Survey (CES) is designed to assist colleges in identifying the reasons why students leave college prior to completing a degree program. The CES enables a college to focus on certain programs, functions, and policies that could be analyzed and, perhaps, changed for the purpose of increasing student retention.

Each college will need to develop a strategy and program that are suited to its own needs as these are determined on the basis of the CES report and any other information it can collect about student attrition on its campus. In some cases it may be possible to get immediate results; however, little should be expected in the way of easy answers. In many instances, a college may not observe positive results for some time because of the need to study the data, to design a program, and to implement changes.

CES Data Reports

When a college forwards its set of completed surveys to the CASC module coordinator, the responses for items 1-50 and 52-57 of the CES are keypunched and fed through a computer. The numbers of former students indicating a "4" ("very important") and "3" ("important") on items 1-50 are counted, and a percentage of respondents is computed for each. The percentages for "very important" and "important" are combined and reported to the participating colleges. A small segment of this report, using hypothetical data, is presented in *Table 11*. Each participating college is able to compare its own percentage on each item with the average and range of percentages collected from other colleges that have participated in the data service. Since it may be useful to compare the responses on items 1-50 and 52-57 by sex and by major, data reports organized to show these influences are provided to participating colleges.

College personnel should record the data from item 51 ("other") and from the open-ended questions at the end of the CES to be used as local indicators only. Compilation of these data can be done after the forms are returned to the college. It may help to fit each of the responses from these items into one of the six categories displayed in Table 14.

TABLE 11

PERCENTAGE OF RESPONDENTS INDICATING "VERY IMPORTANT" (4) AND "IMPORTANT" (3) REASONS FOR ATTRITION

(excerpts only)

	Items	Sample College A % 3+4	National Average % 3+4	National Range % 3+4
1.	Family problems prevented me from continuing	15	14	9 - 37
2.	Difficulty in developing proper study habits	10	15	8 - 21
6.	Disappointed in relationships with the opposite sex	17	10	9 - 17
8.	Quality of my major wasn't up to my expectation	22	35	10 - 54
16.	Couldn't decide upon a career related to college study	18	17	12 - 22
19.	Didn't receive enough financial aid to stay in college	36	30	12 - 61
20.	Food in college cafeteria was not to my taste	27	15	6 - 27
27.	Found better educational opportunities elsewhere	34	45	24 - 50
28.	Left to get married	18	12	2 - 24
36.	This college didn't seem to fit me, to be what I wanted	28	39	16 - 48
37.	Disappointed with quality of teaching	20	22	13 - 39
43.	My goals, values and interests were different from those of this college	19	30	13 - 52
46.	Religious atmosphere too conservative	17	20	8 - 34
52.	Sex: Male	37	31	0 - 67
	Female	63	67	29 - 100
54.	Enrolled elsewhere now	33	46	32 - 55
55.	Plan to:			
	Enroll at this college	11	5	0 - 24
	Enroll elsewhere	20	14	5 - 20
	Stay out of post-secondary education	19	17	8 - 24
57.	Major:			
	Humanities	20	20	5 - 27
	Natural Science & Math	14	21	5 - 49
	Social Science	45	42	25 - 68
	Other	3	3	1 - 8
	Undeclared	12	7	2 - 12
	Unknown	6	8	4 - 16

HYPOTHETICAL

E. Interpretation and Use of College Experience Survey Data

The primary CES report (excerpts only) is displayed in Table 11. In addition to the individual college report on the percentage of former students ranking each item either "very important" or "important" (See College A), the average percentage for each item for *all* participating colleges is displayed in the table, along with the range of percentages for all colleges per item. Each participating college, therefore, is able to compare its percentage to the average percentage on each item. The larger the positive difference between a single participating college's percentage and the average percentage on any given item, the greater will be the importance of that item for a college.

The significance of this difference is illustrated by the comparison of hypothetical institutional and national averages in *Table 12.* The items were selected for this example because the complete report to College A revealed that these items have significant differences (a 20% positive difference between college percentages and national average percentages is probably a good initial criterion for inclusion on this list).

The data in Table 12 could be used by a retention committee at step six of the process reviewed in Part IV of this *Manual* (see page 23). Sub-committees can begin to interpret and use the data to effect campus changes that might ultimately lower the attrition rate. For instance, the preponderance of the items listed below (6, 18, 29-34) have to do with interpersonal relationships with other students through activities. Indirectly, item 42 also refers to this desire for a more active social life. Perhaps a

TABLE 12

COLLEGE A's CES ITEMS RATED EITHER "VERY IMPORTANT" (4) OR "IMPORTANT" (3) THAT INDICATE MAJOR DIFFERENCES FROM THE NATIONAL AVERAGE

	Items	College A % 3+4	National Average % 3+4
6.	Disappointed in relationships with opposite sex	17%	10%
18.	Residence hall living didn't suit me	31%	16%
19.	Didn't receive enough financial aid to stay in college	36%	30%
20.	Food in college cafeteria was not to my taste	27%	15%
29.	Disappointed with extracurricular activities	36%	23%
30.	Disappointed with intercollegiate athletics	26%	13%
31.	Disappointed with cultural events	26%	16%
32.	Disappointed with fraternities and sororities	19%	12%
33.	Disappointed with social events	34%	26%
34.	Disappointed with intramural athletics	25%	13%
42.	College located where there wasn't much to do	38%	21%
45.	Disappointed with student services	16%	13%

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high-impact program that could also be low-cost could be developed to satisfy the needs indicated by former students' responses to the CES; for example, such a program could center on residence hall living and intramural athletics.

The response to item 19 may indicate a problem with financial aid. It would be appropriate, therefore, to examine the responses to other items on the CES relating to financial aid to see whether a pattern emerges. In other words, other items may show up as important but not be listed in Table 12 as being above the national average. Has the financial aid program been analyzed? Do the financial aid and admissions officers have goals for the number of students to be awarded tuition grants? BEOG? NDSL? CWSP? SEOG? Institutional scholarships? The Student Financial Aid Module permits examination of "unmet need" and provides other information that will assist a college in determining what percentage of institutional funds should be budgeted for financial aid.

With respect to item 20, dissatisfaction with food could be referred to a broadly-based committee that might include the dean of students, the food service director, and a group of students.

The response to item 45 suggests a need to assess the adequacy of such services as career planning and placement, counseling, registration, residence hall room assignments, and other similar student services.

Table 13 illustrates how different the response, interpretation, and program policy implications can be for another college. Those items are listed for which College B's percentage is 20% above the national average.

TABLE 13

COLLEGE B's CES ITEMS WITH MAJOR DIFFERENCES FROM THE NATIONAL AVERAGE

	Items	College B %	National Average %
8.	Quality of my major wasn't up to my expectation. . .	54%	35%
9.	Lack of Communication between Administration and students.	41%	19%
13.	Course work didn't challenge me	20%	13%
17.	Major wanted was not offered	44%	28%
22.	College rules were too restrictive	44%	22%
23.	Academic advising was inadequate	39%	22%
27.	Found better educational opportunities elsewhere. . .	61%	44%
36.	This college didn't seem to fit me or to be what I wanted.	56%	39%
37.	Disappointed with quality of teaching	39%	22%
43.	My goals, values and interests were different from those emphasized at this college.	52%	30%
46.	Religious atmosphere too conservative.	34%	20%

HYPOTHETICAL

The items selected with greater frequency by the former students of College B as compared with those from all colleges tend to cluster in three areas. The first is that of academic considerations for leaving. Items 8, 13, 23, 27, and 37 strongly suggest that curricular opportunities and teaching processes should be examined. A faculty-administrative-student committee might analyze the problem and make recommendations for change; for example, faculty might decide to hold a teaching effectiveness workshop.

A second cluster of items is related to campus climate and college life. Items 9, 22, and 46 indicate a possible problem in this area. It could be inferred that former students perceive an authoritarian approach to college-student relationships and that this attitude has a substantial bearing on student attrition. The responses may indicate a need for further analysis of institutional climate by using the PDS College Goals and Climate Module. Perhaps an examination of college programs and policies by using some of the tools and methods suggested in the PDS module, A Marketing Approach to Program Development, would be enlightening. Write-in comments under item 51 may also be useful in developing an understanding of what is happening in this area.

A third general impression of College B responses comes from the combination of the first two clusters but is addressed directly by items 17, 36, and 43. Changes in academic programs and institutional climate may reduce the intensity of responses to 17, 36, and 43, but perhaps something more broad and pervasive is revealed here. The college might find some of the tools and methods suggested in the market analysis manual very helpful in clarifying the type of student they want to serve and in deciding how to better satisfy their interests and needs.

A retention committee might also want to examine items for which the percentage difference between their college response is not 20% above the average percentage of other colleges. Even though some of these items may reflect a lesser difference in intensity, they may be of assistance in forming patterns and clusters and may help clarify reasons for student attrition. This type of item analysis and clustering would emphasize high percentage items that did not get included in lists such as presented in Tables 12 and 13 because they were not higher than the national average. Tables 12 and 13 display distinctive problems, but the problems "typical" of colleges and college students may also be important to analyze and deal with.

Table 14 shows how CES items can be categorized. Putting items into categories such as "personal," "academic," etc., may help college personnel identify response patterns. However, items should not be relegated exclusively to particular categories. The patterns and groupings that are most natural to individual colleges will have the greatest significance for them.

It is also important to summarize the "other considerations" from item 51 as well as any other written comments. This information frequently provides valuable insights that can be helpful in designing retention programs.

Specific emphases needed in retention programs can sometimes be determined by separating responses according to sex and major field of study (CES items 52 and 57).

TABLE 14
CES ITEM CATEGORIZATION

Personal:	student's own feelings, attitudes, and goals						
	1	10	21	38	39	47	
	4	16	24	36	43	50	
Academic:	student's academic abilities, interests, and expectations						
	2	8	13	17	25	37	44
	5	11	15	23	27	40	48
Financial:	student's inability to meet the cost of this college						
	7	19	28				
Social Life:	student's interpersonal relationships, groups, and activities						
	6	18	29	31	33	35	
	14	26	30	32	34		
Services:	those services provided by the college						
	9	29	41	45			
College Life:	other general aspects of college life or atmosphere						
	3	12	22	42	46	49	

HYPOTHETICAL

Items 53-55 will help the college to know what happened to former students after they left. A higher-than-average percentage transferring to other institutions might be an important clue. The retention committee may even want to consider recommending the development of a specific program to increase the number of former students who return to the college.

Item 56 enables the college to determine the time of year when the greatest attrition takes place. Developing a special program for that time immediately prior to the time of greatest attrition may be advisable.

The next part of this *Manual* makes additional suggestions for analysis, interpretation, and programming; but it focuses mainly on the integration of these and other activities into an on-going and institutionally-tailored approach to student retention.

PART IV

DESIGNING AN INTEGRATED PROGRAM TO INCREASE STUDENT RETENTION

A. Introduction

This part of the *Manual* is designed to assist the user in coordinating the development of a data system, as well as institutional functions and programs that are needed as components of a strong student retention program.

Many colleges have been involved in one or more activities described in the steps outlined in Section B but have never integrated these steps to effectively influence student retention. The approach recommended here involves a number of people from various segments of the campus community in problem identification and definition, consideration of important variables, the gathering of relevant data, and the development of a plan for improving retention. The plan is then implemented and data are gathered to assess the effectiveness of that plan. The whole process is then repeated occasionally to consider changes that might further increase program effectiveness. This is a type of "action research planning"[5] – a method for improving a particular condition within a given environment. The basic concept is that action (i.e., programs, personnel development, policy change, etc.) should be based on the best information available and that there should be broad participation in the planning process.

B. Planning for Student Retention

The steps outlined below are intentionally listed in a particular order but might also be called "elements" of a student retention program that could occur in a different sequence or combination of sequences. The steps, then, are recommended as a checklist of activities or functions that should be included in an integrated program.

[5] For further information, see: Stephen M. Corey, *Action Research to Improve School Practices* (New York: Teachers College, Columbia University, 1953); John D. Lindquist, *Strategies for Change: Innovation as Adaptive Development* (Cardiff, Calif.: Pacific Soundings Press); Arthur W. Chickering et al., *Developing the College Curriculum: A Handbook for Faculty and Administrators*, part 4 (Washington, D.C.: Council for the Advancement of Small Colleges, 1977).

Step 1

The first step might be to establish a college-wide committee with responsibility for developing a plan for improving student retention. Consisting of faculty members, administrators, and students, this committee should have the power to divide into sub-committees and to add personnel to the sub-committees for the purpose of focusing on specific areas for study and action. If the committee represents the full range of campus concerns, it will provide a variety of avenues for information dissemination and program implementation. Committee members, as well as the college, must be prepared to commit time, energy, and resources in order to develop an effective program.

Step 2

Developing a plan for increasing a college's retention rate will require considerable research. For this reason, it is important that the committee establish responsibility for data collection, analysis, and interpretation. Although the committee should have general responsibility for these activities, usually someone such as an institutional research specialist, registrar, assistant dean, student personnel officer, or faculty member will do the research. The committee should take the responsibility for making decisions about the areas to be researched and the overall design and/or selection of research models or services. A primary purpose is to begin to build, at this early stage, campus-wide ownership of the data in order to increase the extent of its impact on program decisions.

Step 3

The third step might be to use the Rate of Attrition (ROA) instrument for the purpose of identifying the college's attrition rate and comparing it with those of other colleges in the CASC national data base. Having identified the attrition rate, it is then possible to establish the retention rate that will serve as the baseline for subsequent internal monitoring. The committee may wish to set some initial, or even tentative, retention goals at this point, even though goal-setting is discussed more fully in step 9. The danger of goal-setting at this stage is that the committee may depend too heavily on comparative data from other colleges. The comparative data of the ROA are *not* intended to represent an ideal. The "average" may be unattainable to one college, while another may already find itself above-average and yet have the potential to improve student retention even more.

Step 4

The retention committee must next communicate its tentative findings to the rest of the campus community and make decisions about next steps. One purpose of this step is to encourage awareness and ownership of, and involvement in, the program beyond the committee and throughout the campus. Committee members should discuss the attrition issue with the segments of the campus community that they represent, broadly distributing the information available. A second purpose is to encourage suggestions that become a part of, and enrich decisions about, next steps.

Step 5

A possible fifth step is to assess systematically the causes of attrition. The use of the College Experience Survey (CES) to determine functions, programs, services, and policies of the college that may need improvement is one way to accomplish this. Homemade instruments, as well as brainstorming sessions with students and alumni, can be used in place of, or to supplement, the CES.

Step 6

Here the purpose is to study the information collected from the CES and other sources and to use and interpret the data in ways similar to those suggested in Part III of this *Manual.* At this step the committee may want to divide into sub-committees and expand their membership with supplementary campus personnel for the purpose of intensive study of identified problem areas. Recommendations of changes in programs and policies should be solicited from all areas of the college.

Step 7

In the seventh step, priorities are set for the elements of the retention program that emerge from the study. From this list, an integrated set of activities and changes can be designed that appears to hold promise for improving the retention rate. These should be recommended to appropriate policy-making groups and/or be directly implemented if that authority has been given to the committee.

Step 8

The eighth step is to provide for implementation and follow-up. Specific responsibility should be assigned to committee members and staff to follow through on getting program elements initiated. Evaluation schedules and criteria will be helpful, and the committee should expect regular progress reports.

Step 9

The ninth step is to set specific goals for a higher rate of student retention. In determining the new retention rate, the committee will want to compare its rates with those of other colleges of similar size, type, and geographic region as well as to analyze carefully the realities of their setting, programs, and constituency. The retention target should be set in terms of the percentage of new freshmen who enroll for the second year, the third year, and who graduate. An increase of five percentage points in the number of freshmen who graduate would be a very significant increase.

Step 10

During the tenth step, the program is monitored. One aspect of such an evaluation is to provide continuing pressure for the implementation of program elements. Retention rates must also be compared with the retention goal at established, regular intervals to assess the effectiveness of the program and, wherever possible, program elements. Finally, an ongoing responsibility is to refine and add various elements as needed.

C. Retention Ideas That Have Worked at Other Colleges

The suggestions of possible retention program activities listed here are not intended to detract from the integrated approach emphasized in this part of the *Manual*. Much of the value of a broad, systematic analysis of attrition and the careful design of a retention program results from the actual process of having a broad spectrum of people from the campus community work together to improve the educational experiences of students. An ongoing project of this type can renew the vitality of a college and help keep its primary purpose in focus. These brief descriptions may, however, provide some ideas for retention committees or at least illustrate the type of activities that some colleges have found to be effective.

Alert System

A faculty member, administrator, or staff member who becomes aware of specific student behavior that may precede leaving (e.g., successive class absence, several poor grades, social problems, etc.) records that information on a card and transmits it to a student affairs officer. That person then initiates contact with the student in an effort to retain him.

This program requires the identification of specific pre-attrition behavior patterns, campus personnel orientation and training, and development of a fast and sensitive responsiveness on the part of the student affairs office.

Neighborhood Concept

Entering freshmen are assigned to heterogeneous groups of 12 to 16 members in freshmen residence halls. A resident assistant (usually an upperclass student) is assigned to the group and has the responsibility, under supervision, to develop a cohesive unit. Training and support are provided to the resident assistant. Sometimes it is necessary to alter the physical arrangements of the residence hall so that each neighborhood's area is distinctive. This program can be extremely helpful to certain personalities.

Significant Others

Freshmen are administered a questionnaire in the fourth, fifth, or sixth week of their matriculation. The questionnaire is designed to determine whether they talk over critical

decisions with one or more persons ("significant others") on campus. Those who do not indicate such contact are brought together with potential "significant others" through interest groups or some other means.

The program is built on the assumption that many students do not leave college because of such traditional reasons as curriculum, food, and financial aid, but simply because they have not been able to develop significant human relationships on campus.

Student Advisor Program

Six new freshmen are assigned to a carefully-selected upperclass student who is given information needed to answer the typical questions of freshmen. The upperclassman is trained in listening and in other critical human interaction skills. This person also assists the academic advisor in course advisement for the new freshmen. The student advisor initiates a series of contacts (approximately eight) with his six "advisees" throughout the first term and inter-term. Student advisors may be given stipends and/or academic credit, but they should be selected primarily because they want to be involved in this effort to assist freshmen.

The program not only expands the number of college personnel who are able to advise students but also creates contacts for new students with people who might be able to understand and help with freshmen problems more than would most faculty.

Extended Freshman Orientation

Freshmen meet one hour per week to discuss career planning, organization of time, college-student expectations, or study techniques. Any special needs students may express can be dealt with at this time. The program is usually under the leadership of the dean of student affairs, but small-group discussions led by selected staff, faculty, and upperclassmen may also be highly effective.

Faculty and Staff Development Programs

A faculty development program, possibly using ideas presented in CASC's two-volume handbook on faculty development,[6] or other programs intended to sensitize faculty and administrators to student needs, may be necessary in colleges that have identified this as an area of weakness. Student assessment of instruction and advising may also be useful in improving faculty effectiveness if that is an area of concern.

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[6]William H. Bergquist and Steven R. Phillips, *A Handbook for Faculty Development*, Vol. I (Washington, D.C.: Council for the Advancement of Small Colleges, 1975) and Vol. II (Cardiff, Calif.: Pacific Soundings Press, 1977).

Teacher Effectiveness Training. A 36-hour training program is available from Teacher Effectiveness Associates in Pasadena, California.[7] The program emphasizes skills that increase the effectiveness of communication between teachers and students. Teachers identify the barriers to communication in their own speech patterns and learn effective skills for interacting with students. These new skills have a high probability of helping students solve their own problems, of producing a relationship of mutual respect between teacher and student, of enhancing students' self-esteem, of increasing teacher perception of students' social and educational backgrounds, and of fostering a classroom climate of intellectual freedom and creativity.

Instructional Development and Effectiveness Assessment System (IDEA).[8] A system based on student appraisal of instruction, IDEA provides a faculty member with the opportunity to identify his or her own teaching objectives for a particular course and then asks the students in that course to assess their progress on the objectives. Students also report on the frequency of 20 specific teaching procedures or methods used by the faculty member in the classroom, which are then repeated as relative strengths and weaknesses. Individual faculty development programs subsequently can be designed to meet apparent needs. Workshops can be used to supplement the program, and the IDEA instruments can be used in subsequent semesters to monitor change.

D. Using Other Modules of the CASC Planning and Data System

An integrated approach to the development and maintenance of an effective student retention program has been described in the 10 steps of Section B above. Concerns that surface in the sixth and seventh steps of a student retention program, or those independently identified, may encourage college policy-makers to conclude that other special-focus projects are necessary. In fact, a list of areas requiring analysis and planning can be of tremendous help in assisting a college to move systematically through an institution-wide analysis of each critical area. A comprehensive effort of this type might take several years. Furthermore, a comprehensive, long-range program of institutional analysis, planning, and improved management will be most effective if the approach taken in each area of study is consistent with, and complementary to, any other studies completed, planned, or underway.

The CASC Planning and Data System is designed to ensure comprehensive and interrelated analysis, planning, and management. Total system design, inter-module references, consistency of data element definitions, and other issues related to developing a "system" have been given careful attention.

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[7] Information on the Teacher Effectiveness Training Program may be obtained by writing Dr. Thomas Gordon, President, Effectiveness Training Associates, 110 South Euclid Avenue, Pasadena, California 91101. The book, *Teacher Effectiveness Training*, is available from Peter H. Wyden Publisher, 750 Third Avenue, New York, New York 10017.

[8] For further information on IDEA, call or write: Center for Faculty Evaluation and Development in Higher Education, 1627 Anderson Avenue, Box 3000, Manhattan, Kansas 66502, tel: 913-532-5970.

A complete list of the topics of the other modules is included in this *Manual's* preface. Each of the 11 modular areas has a users manual, similar to this one, which outlines the objectives and features of that segment of the system. Nine of the 11 areas provide data services paralleling the ROA and CES of this Student Attrition Module.

One of the 11 modules, College Goals and Climate, has a data service that is available through the Educational Testing Service (ETS) of Princeton, New Jersey. The data collection instrument, the "Small College Goals Inventory," was developed by the CASC Research and Management Project in conjunction with ETS. The manual for this module performs the same function in the area of institutional goals and campus climate as do the manuals for each of the other areas.

Two other modules (A Marketing Approach to New Program Development and Student Learning Outcomes) do not provide management information reports with institutional and comparative data but do suggest ways in which to collect, display, and use statistical and descriptive information in these areas of focus. The users manuals for these two modules also feature specific processes or sequences of activities that are critical to institutional applications of the concepts and techniques of the modules.

In addition to users manuals and data services, other support services and elements of the delivery system are available in each modular area. They are designed primarily to support colleges using the PDS but can, and will, be focused on the specific needs of participating colleges.

For example, workshops—national, regional, and on-campus—are arranged on demand. They feature indepth coverage of the material outlined in the users manuals and also deal with the special concerns of participants. Some of the workshops may combine several modular topics that complement one another.

Consultations in each area are available through the CASC National Consulting Network. Funds from the Carnegie Corporation of New York have enabled CASC to train experienced campus practitioners in the details of a module, the use of the total PDS, and general college planning principles and practices.

The comprehensive Planning and Data System should be examined for how it, as a whole, can assist a college. Administrators are encouraged to make use of some combination of several of the system's modules and to receive assistance in developing their own comprehensive data system and planning process. This service may require a year or two of diagnosis, data development, personnel training, consultations, supervisions, and support. All of the resources of CASC are available through such a service. Administrators or others interested in discussing the comprehensive service should call the CASC Planning and Data System Office, (202) 659-3857.

APPENDIX

DEVELOPING AND TESTING THE MODULE

A. Background

A CASC emphasis since the mid-sixties has been the design and use of new management and planning data, tools, and methods. Initial projects and workshops featured such methods as 10-year fiscal projections,[9] cost analyses of academic programs, [10] and planning processes.[11]

From 1972-73, CASC served as the assisting agency for the Institutional Research and Planning Project (IRPP), a three-year, USOE Title III program. The IRPP assisted 15 CASC colleges in establishing offices of institutional research and planning.

During the first two years of the Project, a diagnosis of individual college concerns revealed a need for data to analyze and monitor student attrition and retention; several of the 15 institutions developed and conducted separate attrition studies. When the results and findings were shared, the need for a common research design and common definitions became evident.

During the third year of the IRPP, a Student Attrition Committee was formed which began work on common definitions, essential data elements, and formulas for processing attrition data. An early discovery that had significant impact on the design of the current Rate of Attrition instrument was that approximately 60% of student attrition occurs in the freshman year.

Other major contributions of the IRPP Student Attrition Committee were the initial developmental work on a rate-of-attrition instrument and the identification of essential factors needing further analysis because of their probable impact on attrition.

The following persons were members of this committee: Sister John Marie Corrigan (Dominican College of Blauvelt), Paul Gilchrist (Covenant College), Susan Kistler (Salem College), Harriet More (Notre Dame College), John Newby (Spring Arbor College), Charles Oestreich (Texas Lutheran College), and John Stahl (Eastern Mennonite College).

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[9] Sidney G. Tickton, *Needed: A Ten Year College Budget* (Washington, D.C.: Fund for the Advancement of Education, 1961).

[10] L. Richard Meeth, *Quality Education for Less Money* (San Francisco: Jossey-Bass, 1974).

[11] NACUBO, *A College Planning Cycle: People–Resources–Process: A Practical Guide* (Washington, D.C.: NACUBO, 1975).

B. Student Attrition Task Force of the Research and Management Project

When the CASC Research and Management Project was funded by the Carnegie Corporation of New York in the summer of 1975, a Student Attrition Task Force was created as a part of the project. Task force members, named in the Acknowledgments of this *Manual*, were selected on the basis of experience and expertise, and began their work where the previous attrition committee had concluded. The literature on student attrition was reviewed and interviews were conducted with all known researchers and developers of tools and instruments.

C. Development and Testing of the Rate of Attrition Instrument

One objective of the Student Attrition Task Force was to develop an instrument which would provide colleges with a quick and useful way of measuring the magnitude of attrition. It soon became evident that all variables could not be included if the product were to be a simple instrument and data collection procedure. As a result, the task force decided that the instrument would deal only with *full-time freshmen entering in the fall term*. By limiting the analysis to this student group, most of the typical attrition problems could be accounted for and a national data base of comparable information could be developed.

The task force concluded that a simple formula could not be developed to provide data on such other important variables as (1) students entering at other times during the year, (2) transfer students, (3) returning students, (4) varying numbers of part-time students, (5) the fact that some four-year colleges have two-year programs, and other similar factors important to some colleges.

The data processing procedure was kept relatively simple by using the number of full-time freshmen entering in the fall of a given year as the base and by determining the percentage of this group that returned after one year and again after two years. By this method, an average attrition rate after one year and after two years of enrollment was established.

A preliminary instrument was pre-tested on 10 campuses. This procedure produced the need for a more precise definition of the terms on the data collection form. Data element definitions were refined, and the instrument was then pilot-tested at 12 additional colleges. As a result, the data element definitions were determined to be adequate, and the attention of task force members was directed toward the development of a report format and data processing software for the Module.

A nationally representative sample was selected to field-test the suitability of the instrument for different types and sizes of independent colleges and to provide an initial comparative data base. A stratified random sample of 101 colleges was taken from the total population of 700 small independent colleges in the United States. Of this number, a balanced sample of 45 provided useful data.

D. Development and Testing of the College Experience Survey

The second major concern of the Student Attrition Task Force was to assist colleges in determining the *causes* of attrition. An initial survey instrument was developed to include possible reasons for a student's leaving that might be important to small colleges. *Revolving College Doors . . .* by Cope and Hannah[12] was used as a reference for earlier surveys and possible survey items. Items were reviewed for language clarity, a questionnaire was developed, and a format was created for the compilation and analysis of data. A computer program was written to tabulate the survey information; this provided for the statistical analysis of each item, for grouping the items into categories, and for analyzing particular groups of respondents.

The survey was then pre-tested at four colleges. After analyzing the responses and discussing the project with the pilot colleges, the initial College Experience Survey (CES) was revised. The instrument and data collection process were then field-tested by 11 additional colleges, and a thorough analysis of the usefulness of the data was done for each college. The initial draft of an integrated process for developing and implementing a retention program was developed to assist colleges, using the results of the Rate of Attrition instrument and College Experience Survey. It was revised into its current form (See Part IV, Section B) after being tested on several campuses and receiving critiques in a number of workshops.

Initially, only the mean for each item was reported for a participating college. While this information was helpful, it did not identify the unique problems of each institution. A report format was developed that not only displayed the responses of a particular college but also provided a basis of comparison with other institutions. This, of course, helps highlight problems of significance to the college using the data service.

Report forms were developed and computer programs written to produce the reports. After still further refinement and clarification, the new data capability was offered as the PDS Student Attrition data service.

This *Manual* was then developed as a part of the Module.

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[12] Robert Cope and William Hannah, *Revolving College Doors: The Causes and Consequences of Dropping Out, Stopping Out, and Transferring* (New York: John Wiley and Sons, 1975).